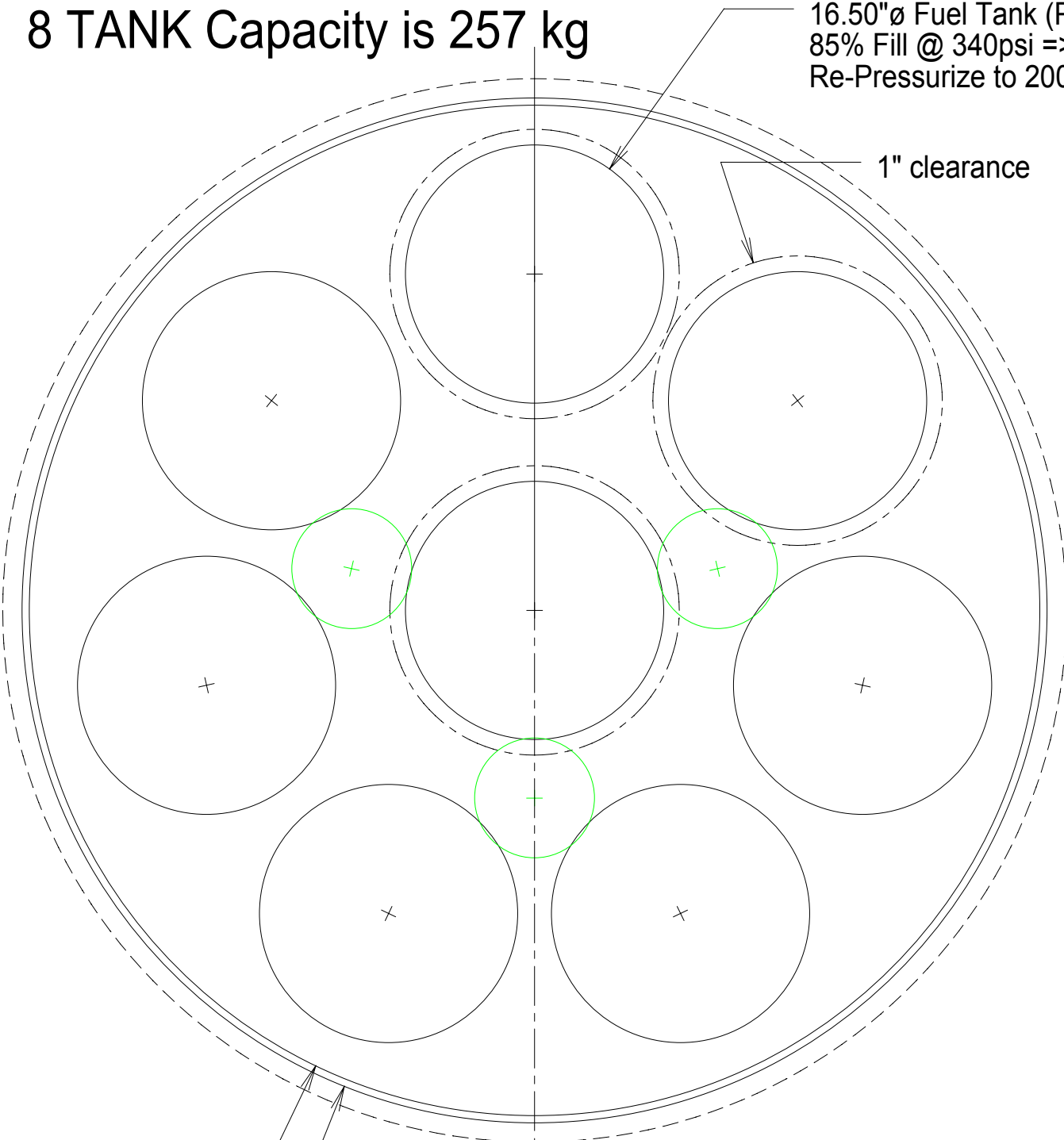


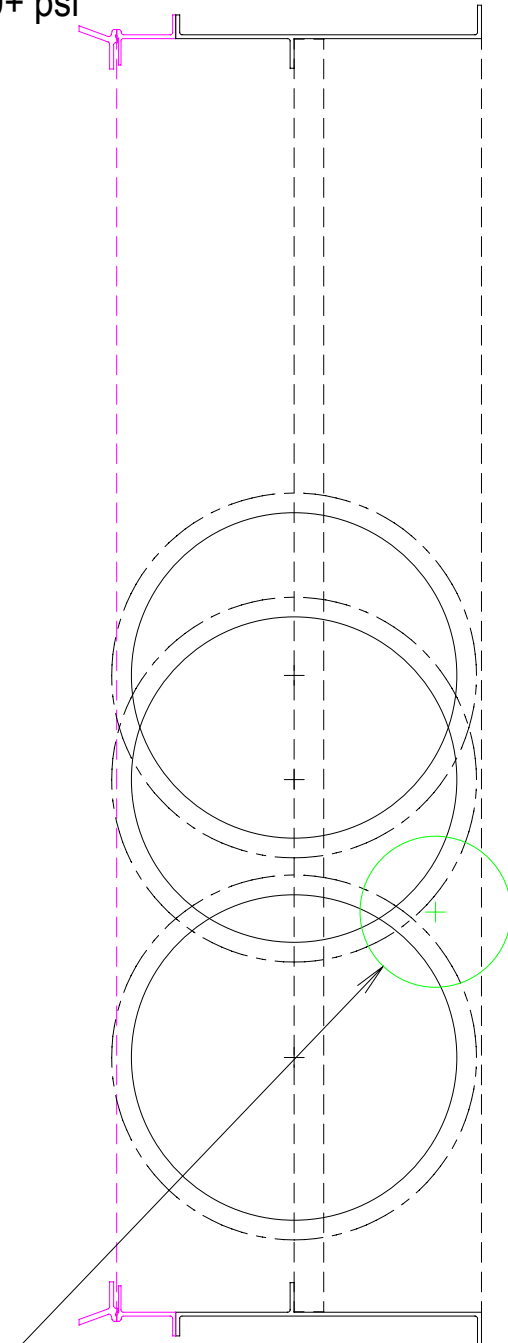
8 TANK Capacity is 257 kg

16.50"ø Fuel Tank (PSI #80303-1)
85% Fill @ 340psi => 100psi @ 50%
Re-Pressurize to 200+ psi

1" clearance

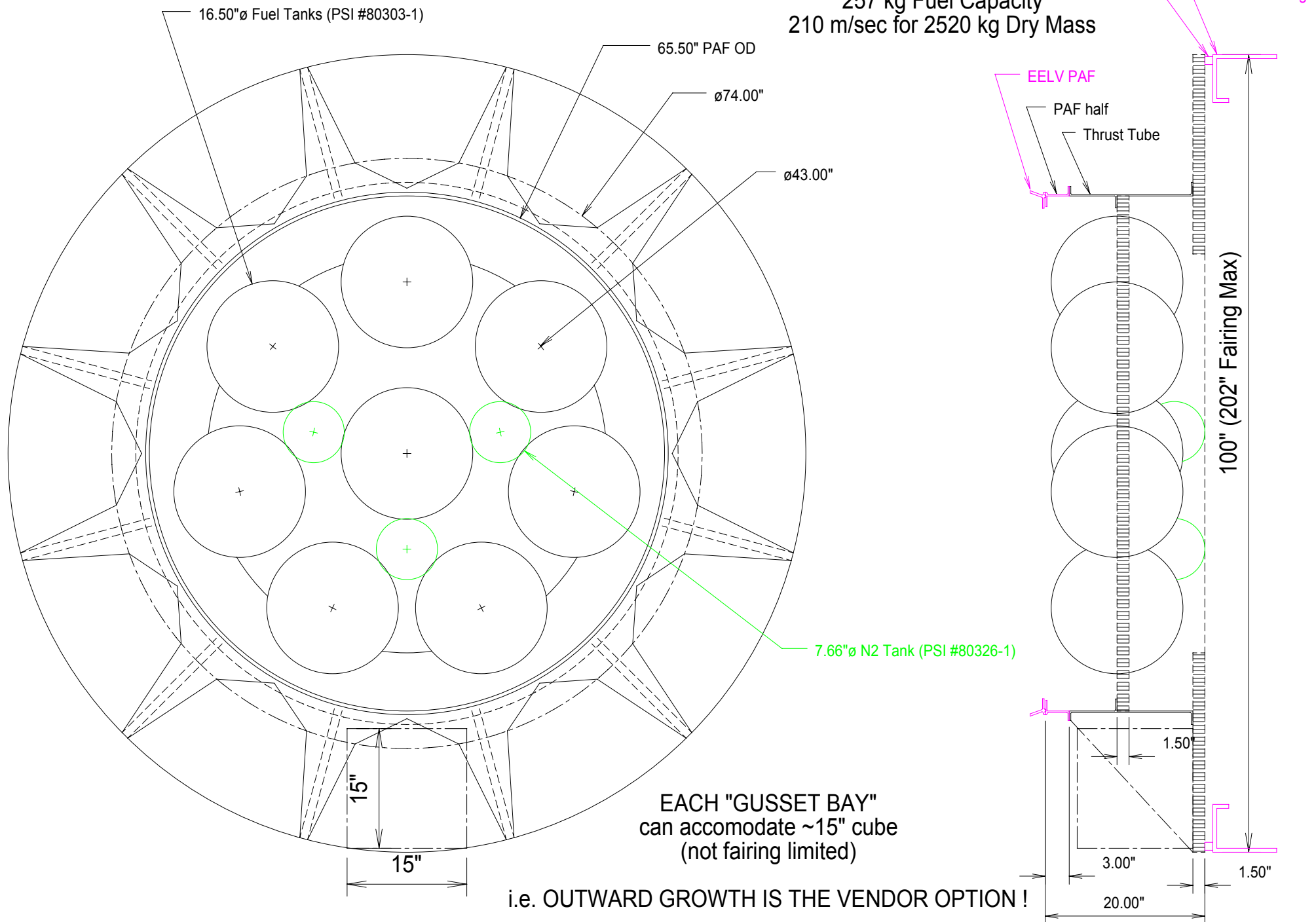


65.50" Delta 4 PAF ID
64.57" Delta 4 PAF OD



7.66"ø N2 Pressurant Tank
PSI #80326 (3 needed)
3600 psi Operating Pressure

SNAP BUS Structure Updates



Monopropellant Thrusters



MR-103G 0.2 lbf REA



MR-111C 1.0 lbf REA



MR-106E 5.0 lbf REA



MR-107B 30 lbf REA



MR-104B 100 lbf REA



MR-80 600 lbf REA

[Contact Space Systems Marketing for Monopropellant Thruster Data Sheets](#)

Home	Contact Us	Products & Services	Space History	Milestones
Find Us				

To send comments or report problems please email: [Webmaster](#)

© Copyright 2002 Aerojet, All Rights Reserved.

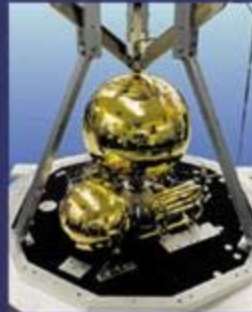
Electric Propulsion & Space Electronics



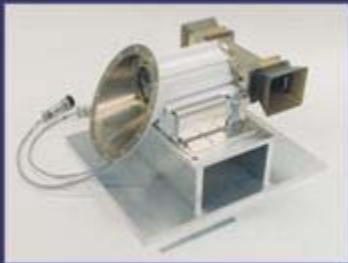
**Electrothermal
Hydrazine Thruster**



**Hydrazine Arcjets and
Power Processing Unit**



**High Power Ammonia
Arcjet and Feed System**



Pulsed Plasma Thruster



Hall Thrusters



Xenon Ion Engine

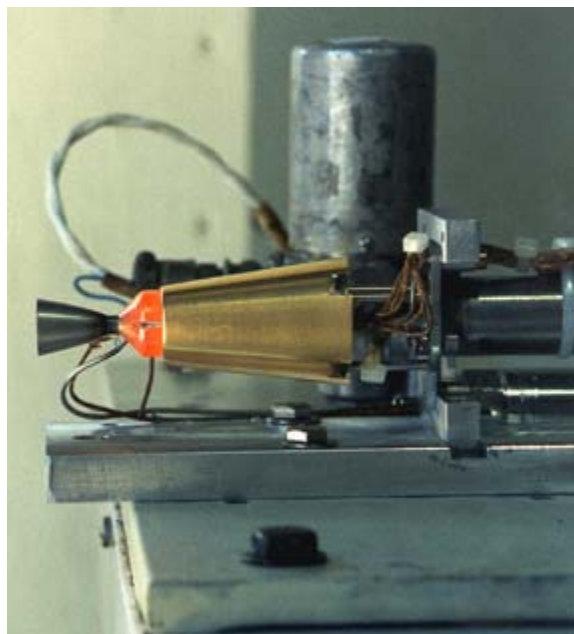
[Contact Space Systems Marketing for EP and Space Electronics Data Sheets](#)

Home	Contact Us	Products & Services	Space History	Milestones
Find Us				

To send comments or report problems please email: [Webmaster](#)

© Copyright 2002 Aerojet, All Rights Reserved.

"Green" Monopropellant Developed for Spacecraft



Hydroxylammonium nitrate (HAN)-based monopropellant thruster test at Primex Aerospace. (Copyright Primex Aerospace Company; used with permission.)

The NASA [Lewis](#) Research Center and Primex Aerospace Company have developed a "green" monopropellant and thruster for replacement of the toxic hydrazine thrusters presently being used on most spacecraft. The thruster developed is a derivative of the Primex 1-lbf hydrazine MR-111C and operates on a hydroxylammonium nitrate (HAN)-based monopropellant. Initial thruster tests have resulted in a specific impulse of 195 sec and a density-specific impulse of 275 g-sec/cm³ (which is 25-percent greater than for state-of-the-art hydrazine thrusters).

Lewis contact: Robert S. Jankovsky, (216) 977-7515, Robert.S.Jankovsky@grc.nasa.gov

Author: Robert S. Jankovsky

Headquarters program office: OSS

Programs/Projects: Projects that use hydrazine or cold gas thrusters



[Previous article](#)



[Next article](#)

[Table of Contents](#)

Responsible NASA Official: Walter.S.Kim@grc.nasa.gov, 216-433-3742,
point of contact for NASA Glenn's Research & Technology reports

Web page curator: Nancy.Amman@grc.nasa.gov (InDyne, Inc.)

Last updated: April 1998